

Fat-derived hormones and energy balance

Guang William Wong

Johns Hopkins University, USA

We aim to understand how various organs and tissues in the body coordinate the complex metabolic networks and circuitry to maintain proper energy balance, failure of which will result in metabolic disorders such as obesity and type 2 diabetes. Specifically, we focus on elucidating the role of a novel family of adipose-derived hormones (CTRPs) in controlling glucose and fatty acid metabolism. We use both gain- and loss-of-function mouse models to address their physiologic functions and mechanisms of action. The function of one such hormone, CTRP12, will be presented to illustrate complex tissue crosstalk underlying the integrated control of whole-body metabolism.

Biography

Guang William Wong received his B.S. degree from Washington State University and Ph.D. degree from Harvard University, followed by post-doctoral training at the Whitehead Institute at MIT. In 2008, he joined the faculty at Johns Hopkins University as an Assistant Professor in the Department of Physiology and Center for Metabolism and Obesity.

gwwong@jhmi.edu